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A Rumble in the Jungle

By NATHAN K. LUJAN, DEVIN D. BLOOM and L. CYNTHIA WATSON JAN. 17, 2013

THE new reality TV series "Bamazon," on the History Channel, along with already established shows like "Gold Rush" and "Jungle Gold," have elevated the global mining bonanza into living-room entertainment. Each focuses on a different group of Americans seeking their fortune in distant, ostensibly dangerous locales: "Bamazon" in Guyana, "Gold Rush" in Alaska and Guyana, and "Jungle Gold" in Ghana. But while these shows claim to depict "reality," they gloss over the most awful truths of gold mining, particularly as it is practiced in the tropics.

It is estimated that up to a fourth of global gold production now originates not from licensed, regulated and monitored mines, but from often illegal, unregulated artisanal, or informal, mines — much like those dramatized in these series. In South America, artisanal gold production, which churns out nearly 450,000 pounds of gold a year, involves millions of people — about four miners and support labor per pound.

Artisanal miners succeed where large, centralized operations fail by evading regulations and targeting gold that has eroded over eons into river sediments, known as placer deposits, that are broadly distributed over vast landscapes.

But to get even an ounce of that gold, miners have to upend tons of river sediment. They pump a continuous slurry of sediment and river water over mats that trap minute fractions of gold-enriched dust, discharging their tailings back into the river.

Periodically, the accumulated gold dust is separated, and the gold isolated by amalgamating it with mercury. Invariably, the mercury is burned off into the

atmosphere or, like the tailings, poured into waterways. Over 1,000 tons of mercury is dumped or burned off annually, and several large rivers have been so exhaustively mined that they simply disappear into vast mud pits that make parts of the Amazon look like the Somme.

Much of the gold being sought by the stars of these shows — and by millions of poorer artisanal miners throughout the tropics — is buried beneath remote and biodiverse pockets of primary rain forest. In some places, like the boomtown of Puerto Maldonado, Peru, regional gold rushes are fueling mass demographic shifts and unchecked urbanization.

In myriad other areas, miners are penetrating deep into poorly monitored headwaters, often crossing national boundaries to create intense pockets of pollution far from any town or airstrip. Many of the indigenous people affected live traditionally in remote corners and are especially susceptible to the disease, violence and promiscuity that accompany miners.

Mercury naturally concentrates in fish, a main staple in the diet of many indigenous people. Throughout South America, hundreds of remote and previously pristine rivers have been contaminated, and researchers are finding increasing levels of mercury in many indigenous people, which over time could cause cancer and severe birth defects.

And the situation is getting worse. Historically low-tech and dependent on manual labor, artisanal mining is rapidly shifting to heavy machinery and is increasingly plugged into the global economy. Satellite images taken over the last decade show that mining's environmental impacts have surged in direct proportion to international gold prices.

It is particularly unfortunate that these shows run on channels like History and Discovery — outlets that once capitalized on the images and stories of nature's bounty. Tropical rivers and forests are marvelously diverse and intricate ecosystems, but the default tendency of these channels is to eschew nuanced portrayals in favor of sensationalist accounts of man-eating fish and reptiles. In this respect, it is perhaps consistent that they now exploit these habitats as a backdrop for glorified plunder.

In a promotional clip for "Bamazon," one cast member and heavy machinery

operator, Clate McDaniel — described as a nature-loving "California hippie" — expresses a mystic's anticipation of finding "plants that can heal" and the "cure for cancer" in the jungles of Guyana. "You never know what you can find in the jungle, it's untouched in so many places," he says, and suggests that his mining team might "discover something new."

We agree. Tropical rain forests and rivers hold an incalculable wealth of undiscovered treasures, each incomparable to gold in its aesthetic beauty. Unfortunately, miners' fingers are not touching but tearing the fabric of the rain forest, and the potential for scientific discovery decreases with every ounce of gold harvested and every river channel annihilated.

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